

1 BILL NO. S-85-06-14

2 SPECIAL ORDINANCE NO. S- 118-85

3 AN ORDINANCE approving City Utilities
4 Purchase Order #A-44575 by the City
5 of Fort Wayne, by and through its
6 Department of Purchasing and RAECO,
7 INC., for the Water Pollution Control
8 Plant.

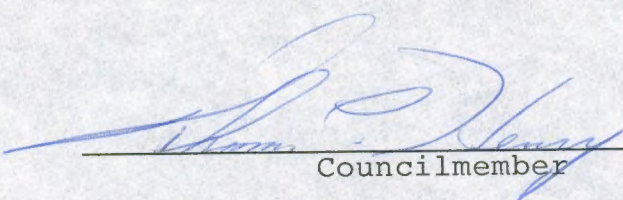
9 NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF
10 THE CITY OF FORT WAYNE, INDIANA:

11 SECTION 1. That City Utilities Purchase Order #A-44575,
12 between the City of Fort Wayne, by and through its City Utilities,
13 and the Department of Purchasing and RAECO, Inc., for the Water
14 Pollution Control Plant, respectfully for:

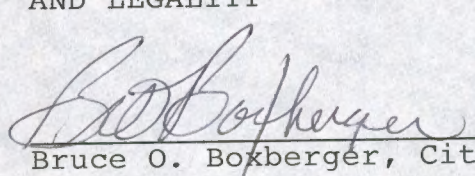
15 approving the awarding of a bid with
16 respect to the purchase of Liquid Level
17 Sensor for the Water Pollution Control
18 Plant;

19 involving a total cost of Eight Thousand Seventy and No/100
20 Dollars (\$8,070.00), all as more particularly set forth in said
21 Purchase Order, which is on file in the Office of the Department
22 of Purchasing, and is by reference incorporated herein, made a
23 part hereof, and is hereby in all things ratified, confirmed and
24 approved.

25 SECTION 2. That this Ordinance shall be in full force
26 and effect from and after its passage and any and all necessary
27 approval by the Mayor.

28 
Councilmember

29 APPROVED AS TO FORM
30 AND LEGALITY

31 
32 Bruce O. Boxberger, City Attorney

Read the first time in full and on motion by Henry, seconded by Stier, and duly adopted, read the second time by title and referred to the Committee City Auditor (and the City Plan Commission for recommendation) and Public Hearing to be held after due legal notice, at the Council Chambers, City-County Building, Fort Wayne Indiana, on _____, the _____ day of _____, 19____, at _____ o'clock _____ .M., E.

DATE: 6-11-85 Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Read the third time in full and on motion by Henry, seconded by Stier, and duly adopted, placed on its passage. PASSED (LOST) by the following vote:

	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAINED</u>	<u>ABSENT</u>	<u>TO-WIT:</u>
<u>TOTAL VOTES</u>	<u>8</u>	<u> </u>	<u> </u>	<u>1</u>	<u> </u>
<u>BRADBURY</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>BURNS</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>EISBART</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>GIAQUINTA</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>HENRY</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>REDD</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>SCHMIDT</u>	<u> </u>	<u> </u>	<u> </u>	<u>✓</u>	<u> </u>
<u>STIER</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>TALARICO</u>	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

DATE: 6-25-85 Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as (~~ANNEXATION~~) (~~APPROPRIATION~~) (~~GENERAL~~) (~~SPECIAL~~) (~~ZONING MAP~~) ORDINANCE (~~RESOLUTION~~) NO. 1-118-85 on the 25th day of June, 1985,

ATTEST: (SEAL)
Sandra E. Kennedy Mark E. GiaQuinta
SANDRA E. KENNEDY, CITY CLERK PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 26th day of June, 1985, at the hour of 11:30 o'clock A. .M., E.S.T.

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Approved and signed by me this 26th day of June, 1985, at the hour of 3:00 o'clock P. .M., E.S.T.

Win Moses, Jr.
WIN MOSES, JR., MAYOR

631

FORM FWPO-1
APPROVED BY THE
STATE BOARD OF
ACCOUNTS FOR
CITY UTILITIES AND
CIVIL CITY OF
FORT WAYNE 1980

City of Fort Wayne

DEPARTMENT OF PURCHASES
NUMBER ONE EAST MAIN STREET, ROOM 940
FORT WAYNE, IN 46802

MAIL ALL CORRESPONDENCE, CLAIM VOUCHERS, ETC., TO:

WATER POLLUTION CONTROL PLANT 310
ONE MAIN STREET
FORT WAYNE IN 46802

RAECO, INC. 2265-01
550 ARMORY DRIVE
SOUTH HOLLAND IL 60473

DELIVER TO: DEPART-
MENT OR DIVISION

WATER POLLUTION CONTROL PLANT
2601 DWENGER
FORT WAYNE IN 46802

PURCHASE ORDER NUMBER

A- 44575

DATE 06/05/85

REQ. NO. 00139

THE ABOVE INFORMATION MUST APPEAR ON ALL INVOICES,
BILLS OF LADING, DELIVERY TICKETS, PACKAGES AND
CORRESPONDENCE.

INVOICE IN DUPLICATE

CIVIL CITY

XX

CITY UTILITIES

APPROPRIATION 5-14-531-F73-34-299
AND FUND NUMBER

U044575

CM

N/A

CASH DISCOUNT TERMS % IF PAID WITHIN DAYS FROM DELIVERY AND
ACCEPTANCE OF GOODS OR PERFORMANCE OF SERVICES. (DEDUCTION FOR DISCOUNT SHOWN BELOW)

QUANTITY ORDERED	UNIT	MATERIALS, SUPPLIES OR SERVICES	UNIT PRICE	AMOUNT
TAX EXEMPT (UNLESS OTHERWISE INDICATED)				
1	LST	*001 SEE LIST BELOW	8070.00	8070.00
		3/EA DLM 24 LIQUID LEVEL MONITORS		
		@1,400.00-----\$4,200.00		
		3/EA DLM 12 LIQUID LEVEL MONITORS		
		@1,290.00-----\$3,870.00		
		TOTAL ORDER-----\$8,070.00		
SUBJECT TO COUNCILMANIC APPROVAL: ORDINANCE NO: _____ DATE: _____				
FOR INFORMATION: PURCHASING			TOTAL	8070.00

COMPLIANCE WITH THE
DELIVERY DATE RE-
QUESTED WILL AVOID
"FOLLOW UP" CORRE-
SPONDENCE.

UNLESS OTHERWISE INDI-
CATED THE PRICES SHOWN
INCLUDE ALL CHARGES
FOR DELIVERY, PACKING,
ETC., NECESSARY TO COM-
PLETE DELIVERY TO DES-
TINATION SPECIFIED.

NOTE

READ
INSTRUCTIONS ON
THE BACK OF THIS
ORDER

THE CONTRACTOR OR VENDOR,
BY ACCEPTING THIS ORDER,
AGREES TO THE GENERAL CON-
DITIONS AND TERMS OF AGREE-
MENT ON THE BACK OF THIS OR-
DER.

UNLESS OTHERWISE INDICATED,
THE PRICES SHOWN DO NOT IN-
CLUDE TAXES OF ANY KIND.

EXEMPTION BLANKS WILL BE
FURNISHED WHEN NECESSARY.

INDIANA SALES TAX EXEMPTION
CERTIFICATE NUMBER
034508-03

IF THIS ORDER DOES NOT
AGREE WITH YOUR QUO-
TATION KINDLY RETURN
IT WITH AN EXPLANA-
TION.

I HEREBY CERTIFY THAT THE COST OF THE ABOVE PURCHASE IS FULLY COVERED BY
UNENCUMBERED BALANCES IN THE ABOVE FUNDS AND THAT THE EXPENDITURE THERE-
FORE HAS BEEN DULY AUTHORIZED AND APPROPRIATED.

I HEREBY CERTIFY UPON MY OWN PERSONAL KNOWLEDGE THAT THIS ORDER IS AUTHOR-
IZED BY A PROPERLY EXECUTED AND APPROVED REQUISITION ON FILE IN THIS OFFICE.

CITY CONTROLLER

DIRECTOR OF PURCHASES



QUOTATION

CHICAGO TEL. [312] 331-8001
DAVENPORT TEL. [319] 324-9021
MILWAUKEE TEL. [414] 342-5755
INDIANAPOLIS TEL. [317] 636-5944

South Holland, Illinois 60473

Telex: 25-4183

T O CITY OF FORT WAYNE INDIANA
Water Pollution Control Plant
One Main Street
Fort Wayne, IN 46802
Attention: Mr. Neal Wisler

THANK YOU FOR YOUR INQUIRY,
WE ARE PLEASED TO SUBMIT OUR PROPOSAL AS FOLLOWS:

QUOTATION NO. 85-436	
DATE May 14, 1985	
PROPOSED SHIPPING DATE 4-6 Weeks ARO	TERMS Net 30
F.O.B. Seattle, WA	
INQUIRY NO.	
QUOTE VALID FOR 30 DAYS.	

ITEM	QTY.	DESCRIPTION	UNIT PRICE	AMOUNT
1	3	Wesmar Model DLM-12 Ultrasonic Digital Level Monitoring System, maximum span - 12', blind space - 18"..... Consisting of the following components: * DLM 12 electronics main board with outputs of 0 to 1 mA, 0 to 5 VDC, 4-20 mA AC including three alarm set points * Digital display of four digits * Nema 4X 14x12x6 enclosure including window kit and back panel.	\$1,290.00	\$3,870.00
2	3	Wesmar Model DLM-24 Ultrasonic Digital Level Monitoring System, span 24', blind space 18"..... The following components supplied: * DLM-24 electronics main board includes output of 0-1 mA, 0-5VDC, and 4-20mA as well as three alarm set points. * Digital display of four digits. * Nema 4X enclosure measuring 14x12x6, includes window kit and back panel.	1,400.00	4,200.00

PLEASE ADDRESS YOUR ORDER TO:

WESMAR
c/o RAECO, INC.

The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for pro-rata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production.

Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein which may appear on purchaser's formal order will not be binding on the Seller.

"Raeco, Inc. grants no warranties, express or implied, except as expressly set forth in this purchase acknowledgment or on Raeco, Inc.'s price quotation form or its invoice. No terms or conditions relating to this transaction shall be applicable unless found on these documents."

Wally Ekstrom
Technical Representative for Wesmar

SIGNED

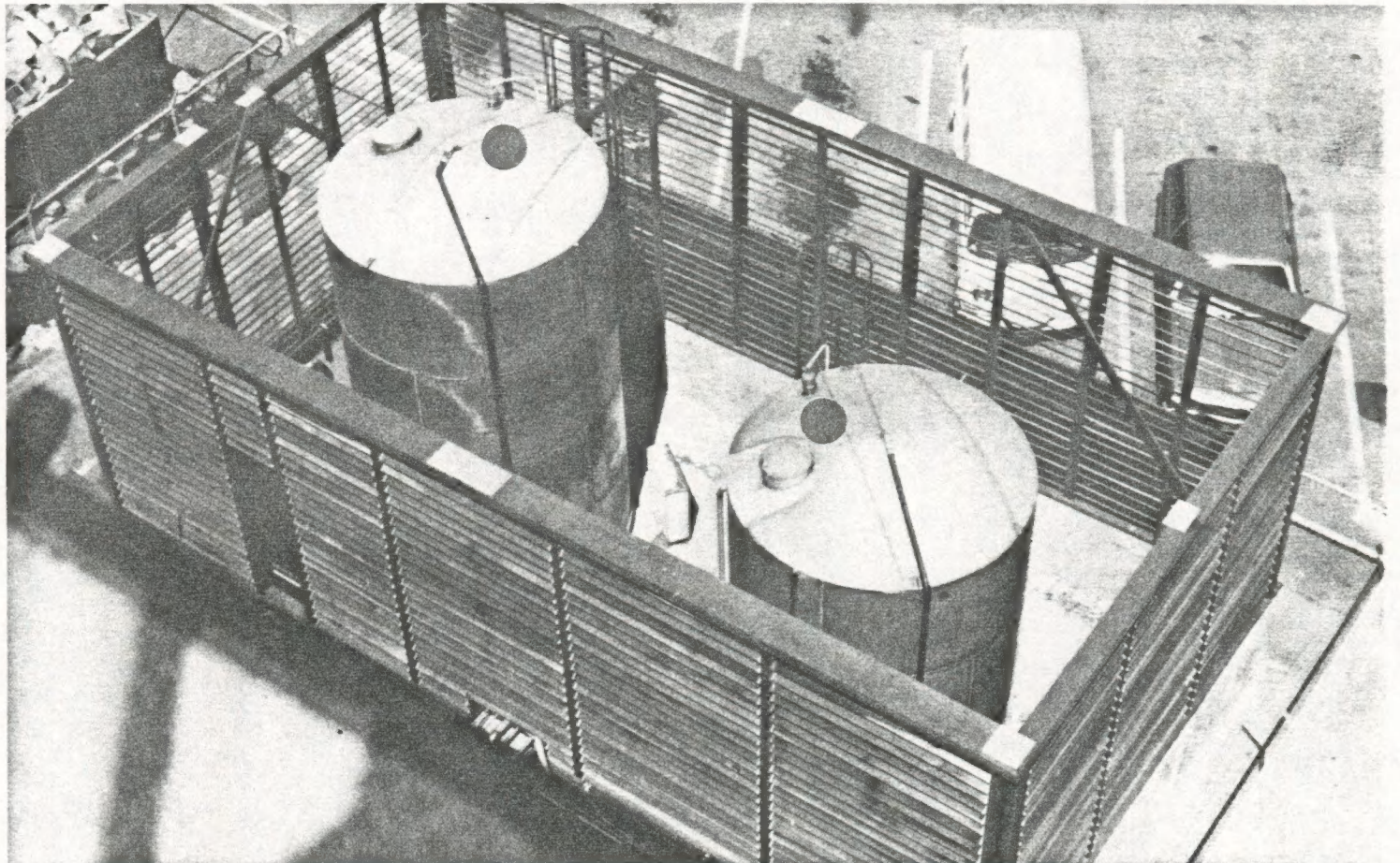
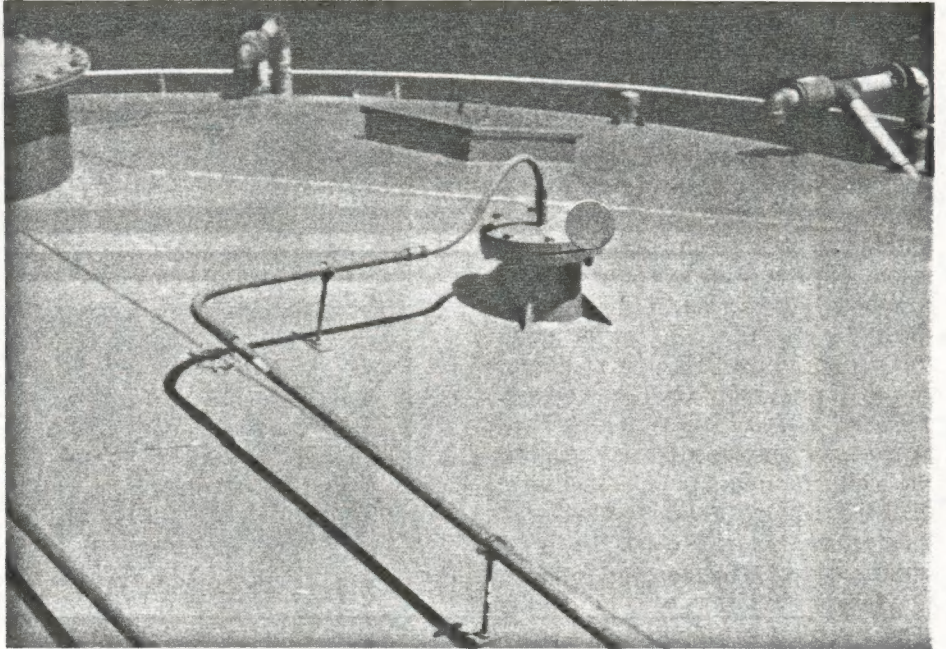
cc: Chuck Cable - Wesmar

DLM12/24

RECEIVED

1985 MAY -3 AM 10:08

EFFECTIVE WHERE OTHER TYPES OF LEVEL MONITORING FAIL...



**All field calibration
completed in less than 5 minutes
with only a screwdriver**

WESMAR DLM12

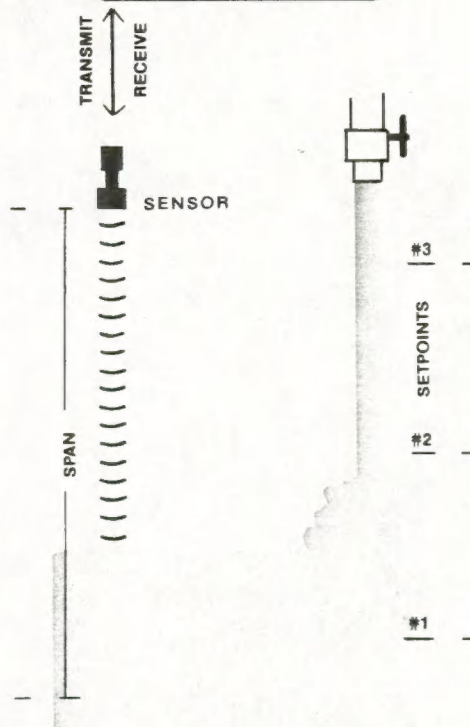
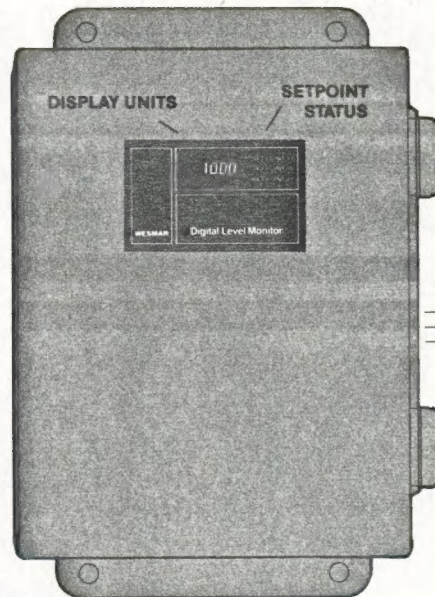
WHY DLM ULTRASONICS?

WESMAR's DLM series Ultrasonic Digital Level Monitors are designed for accurate measurement, reliable liquid level control, and quick, in-field calibration. The DLM sensor (monitoring transducer) is mounted in a vessel above the material to be monitored. This sensor transmits bursts of energy toward the material, and receives the returning echoes. The time between transmission and reception is converted into a measurement of level by the DLM electronics, contained in a separate enclosure nearby. The use of ultrasonic level measurement eliminates clogging, corrosion, viscosity, conductivity and other costly problems experienced by conventional contact-type monitors.

PROVEN PERFORMANCE

WESMAR's DLM12 is ideal for short-range level control to 12 feet. The DLM24 is specifically designed for longer range measurement and level control to 24 feet. Both models interface with a variety of accessories, giving them the versatility required for a wide range of applications, including:

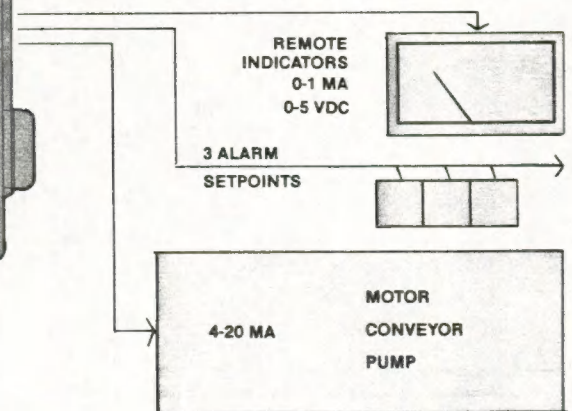
- Metals and minerals mining
- Slurry tanks
- Chemical and process industries
- Food and food processing
- Wastewater



& DLM24...VERSATI

DIGITAL DISPLAY

An integral part of the DLM system is digital display of level information in a four-digit LED readout.



ANALOG OUTPUTS

In addition to the digital display, the DLM series provides a full range of analog outputs as standard features for level control purposes: Three alarm setpoints can be established with DPDT 10 amp 125 VAC relays to activate as level changes. Current output of 4-20 maDC for remote control of motors, conveyors, pumps and computer input. 0-5 VDC and 0-1 maDC outputs for remote indication of level information on meters and recorders.



CONSISTENT LIQUID LEVEL CONTROL TO 24 FEET

PULSED SIGNAL AVERAGING (PSA)

Through a pulse of eight measurements, the DLM's PSA programming averages the level inputs and displays the verified data. This averaging assures the operator of a stable, reliable reading that will not be affected by agitation blades or wave action. The PSA function operates continuously, with each pulse of eight measurements occurring in less than one second.

CONSIDER THESE UNIQUE FEATURES: DIAL-IN MEMORY

The unique DLM Dial-In Memory allows the operator to quickly and accurately calibrate the system to the dimensions of the bin being monitored—with just a simple rotary switch adjustment. The digital display is easily set for units of feet, inches, centimeters, metres, or percent. Three setpoints are also user calibrated in percent.

A simple screwdriver is the only tool required for complete calibration.

- In-field calibration
- No test equipment or service technician required
- Instant visual verification of all settings
- Stable, precise control parameters
- Multiple alarm setpoints in simple percentage format

OVERFILL MEMORY

Unlike conventional ultrasonic instruments which may give erratic or false readings in a overfill situation, the WESMAR DLM series gives a constant, reliable "full" signal throughout the overfill event. All ultrasonic instruments have a "blind space" or minimum range from the sensor face. It is when the level reaches this "blind space" that conventional ultrasonics fail—but not WESMAR's DLMs. Similarly, if the level falls beyond the maximum readable distance, the DLM unit will display a constant "empty" readout until the level rises again. With a WESMAR DLM level monitor, you never lose control.

FAULT MODE

Should a failure occur through signal loss, accidental cutting of the inter-connect cable or extreme damage to the sensor, the DLM system will automatically go into a "Fault Mode." The LED readout will immediately blank its digits and display in their place three decimal points—alerting the operator to the failure situation. Simultaneously, Fault Mode programming clamps all outputs, including the alarm relays at their last status, to maintain control until the problem has

been corrected. In addition, one of the setpoint relays can be connected to an "echo loss" feature to activate audible or visual alarms.

SOFTWARE FILTER

The WESMAR DLM systems are programmed to filter out extraneous signals that might give a false or inaccurate reading. This feature is essential for accurate ultrasonic control, especially in a high-noise environment.

RUGGED, HIGH POWER SENSORS

WESMAR's proven, acoustic-matched sensor design overcomes inherent difficulties in sonic measurement such as poor material reflectivity, signal attenuation and acoustical interference—detecting return signals in even the most adverse working environments. The LMS-15K sensor is rated explosion proof by Factory Mutual Research for Class I, Division I (Groups A, B, C and D) and Class II, Division I (Groups E, F and G) hazardous area. It is encapsulated in Kynar® PVDF to provide long-lasting operation in harsh thermal and chemical environments.



SET SPAN:

UNIT
FEET
INCHES
METRES

SETPOINT 1
%

SETPOINT 2
%

SETPOINT 3
%

Span:
DLM12: 0-3.6m (0-12ft.)
DLM24: 0-7.3m (0-24ft.)

Maximum Range:
Digitally selectable by user,
dependent on scale selected.
DLM12: 4m (13.5ft.) from sensor face.
DLM24: 8m (25.5ft.) from sensor face.

Blind Space:
46cm (18in.).

Analog Outputs:
0-5V (1 mA maximum); 0-1 ma,
4-20ma into 800ohm maximum.

Readout:
Four (4) digit LED display.
Update adjustable from
.7 seconds to 18 seconds.

Scales:
Inches, feet, centimeters, meters, percent,
normal (airspace) or inverted (material
depth); switch selectable by user.

Alarm Setpoints:
Three (3) independently adjustable (0-99%)
setpoint relays rated 10 amp @ 125 VDC
resistive DPDT contacts.

Setpoint Option:
Switch selection to provide latching operation
of one relay (adjust the on/off points at
different levels).

Enclosure:
DLM12: 305mm x 254mm x 127mm JIC
(12in. x 10in. x 5in.)
DLM24: 356mm x 305mm x 152mm JIC
(14in. x 12in. x 6in.)

Operating Temperature:
0° to +50° C. (+32° to +120° F).

Input Power:
100-130 VAC/200-260 VAC, 50-60 Hz, 10 W.

Synchronization:
Multiple units may be synchronized to avoid
mutual interference.

Maximum Separation
between sensor and electronics:
Up to 91m (300 ft.) with RG62/U. Consult
WESMAR for longer separations.

LIMITED WARRANTY AND DISCLAIMER

Seller warrants title, materials, and workmanship on equipment, except components manufactured by others for which Seller assigns, as permitted, the original manufacturer's warranty. SELLER'S WARRANTY PERIOD SHALL BE ONE (1) YEAR AFTER DATE OF SHIPMENT TO THE ORIGINAL PURCHASER, during which time nonconforming equipment returned to Seller at Buyer's expense and risk shall be repaired or replaced at Seller's option. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING DESIGN, COURSE OF DEALING, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE AND SELLER SHALL NOT BE LIABLE FOR LOSS OR USE, REVENUE, OR PROFIT, OR FOR INJURY, OR FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES.

SENSOR:

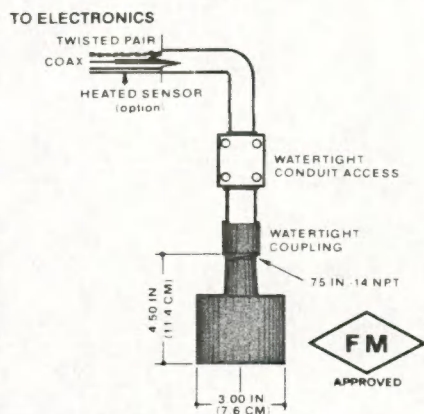
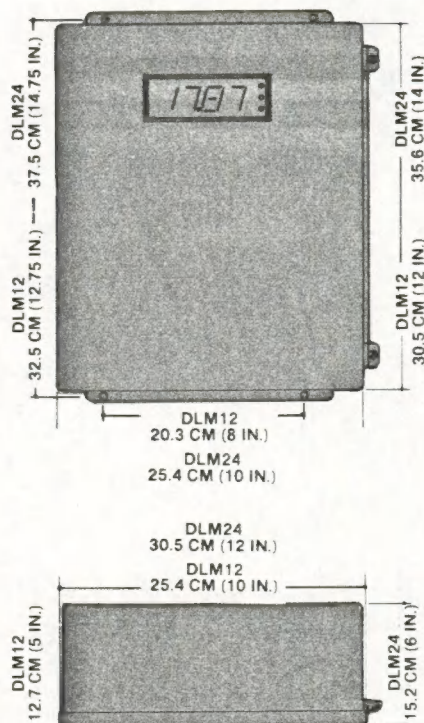
Dimensions:
76mm (3 in.) diameter with 19mm (.75 in.)
male NPT x 57mm (2.25in.) nipple.

Weight:
0.9 Kg (2 lbs.).

Construction:
Kynar® PDVF encapsulated.

Electrical Connection:
RG62/A coaxial cable, 1m (3 ft.) attached to
sensor, 15m (50 ft.) provided with system.

Beam Pattern/Frequency:
7° Cone/42 Khz.



LMS15K KYNAR SENSOR

DLM SAMPLE SPECIFICATIONS

1. Furnish an Ultrasonic Level Monitor System, model DLM- or equal as manufactured by the Industrial Systems Division of WESMAR, Seattle, Washington, for installation on _____.
2. The system electronics shall use dial-in memory for calibration of span, readout scale, alarm setpoints and response rate. Dial-in memory shall consist of digital rotary switches, shall not utilize potentiometers and shall not require a technician or any test equipment to calibrate.
3. Accuracy of the system shall be within 0.1% of full scale space + or - 1 digit for sensor in a constant 21° C (70° F) temperature.
4. Sensor (sensing element) shall be Explosion-Proof and certified by Factory Mutual Research for Class I, Division I, Groups A, B, C and D and Class II, Division I, Groups E, F and G, hazardous areas. Sensor shall be encapsulated in Kynar® and shall be impervious to acid damage and submersion with a high resistance to corrosive and gaseous industrial atmospheres.
5. The unit shall be furnished with a four digit LED readout which will display the level in feet, inches, metres, centimeters, or 0-100%, selectable by dial-in memory. The readout shall also display signal loss conditions by blanking the digits and displaying three decimal points. The readout shall also contain LED lamps for showing alarm setpoint status.
6. The outputs shall be 0-5 VDC, 0-1 maDC and 4-20maDC (10-50maDC or 0-20ma) and have switch selectable update rates from 700 milliseconds to 18 seconds. These analog signals shall hold the last output indefinitely should the received echo be lost for any reason, thereby preventing damage to external control devices.
7. The system shall have three alarm setpoints with double pole, double throw 10 amp relay contacts, which when energized display three alarm lights on the LED readout. Setpoints shall be selected by customer using dial-in memory.

REPRESENTATIVE IN YOUR AREA:

WESMARTM INDUSTRIAL SYSTEMS DIVISION

D-15-06-14

DIGEST SHEETTITLE OF ORDINANCE: SPECIALDEPARTMENT REQUESTING ORDINANCE: PURCHASING

SYNOPSIS OF ORDINANCE: An ordinance approving the awarding of a bid with respect to the purchase of Liquid Level Sensor for the Water Pollution Control Plant.

EFFECT OF PASSAGE: Replacement of sensors damaged in the Flood of 1985.

EFFECT OF NON-PASSAGE: Unable to properly records levels at the Water Pollution Control Plant.

MONEY INVOLVED (Direct costs, Expenditures, Savings):
RAECO, Inc. - \$8,070.00

ASSIGNED TO COMMITTEE (President):__

BILL NO. S-85-06-14

REPORT OF THE COMMITTEE ON CITY UTILITIES

WE, YOUR COMMITTEE ON CITY UTILITIES TO WHOM WAS
REFERRED AN (ORDINANCE) (~~RESOLUTION~~) approving City Utilities Purchase
Order #A-44575 by the City of Fort Wayne, by and through its
Department of Purchasing and RAECO, INC., for the Water Pollution
Control Plant

HAVE HAD SAID (ORDINANCE) (~~RESOLUTION~~) UNDER CONSIDERATION AND BEG
LEAVE TO REPORT BACK TO THE COMMON COUNCIL THAT SAID (ORDINANCE)
(~~RESOLUTION~~)

YES

NO

Thomas C. Henry
THOMAS C. HENRY
CHAIRMAN

Janet G. Bradbury
JANET G. BRADBURY
VICE CHAIRWOMAN

Donald J. Schmidt
DONALD J. SCHMIDT

James S. Stier
JAMES S. STIER

Charles B. Redd
CHARLES B. REDD

CONCURRED IN 6-25-85

SANDRA E. KENNEDY
CITY CLERK